DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A50NM Revision 4 DASSAULT AVIATION FALCON 2000 FALCON 2000EX

March 28, 2007

TYPE CERTIFICATE DATA SHEET No. A50NM

This data sheet which is part of Type Certificate No. A50NM prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the US Federal Aviation Regulations.

Type Certificate Holder Dassault Aviation

9 rond Point des Champs Elysées

75008 PARIS FRANCE

The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 and exported by the country of manufacture is FAR Sections 21.183(c) or 21.185(c).

The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 exported from countries other than the country of manufacture (e.g. third party country) is FAR 21.183(d) or 21.185(b).

Notwithstanding that the FAR referenced in the above paragraph does not specifically address or require a foreign civil airworthiness authority certification, such certification is the only practical way for an applicant to show, and the Federal Aviation Administration (FAA) to find conformity to the FAA-approved type design and conditions for safe operation.

Additional guidance is contained in FAA Advisory Circular 21-23, Airworthiness Certification of Civil Aircraft, Engines, Propellers, and Related Products Imported into the United States.

I. Model Falcon 2000 (Transport Category) approved February 2, 1995

(a) Basic Model Definition

Engines 2 engines. CFE Company, Model CFE 738-1-1B

(see NOTE 3b)

Engine Limits Static, Standard, Sea Level

Take-off (5 min) 5,725 lb (2,547 daN)

Maximum Continuous 5,560 lb (2,474,daN)

Maximum Steady State Rotor Speeds

Low pressure rotor (N1) RPM 9,400 (96.7%)

High pressure rotor (N2)

5 minutes RPM 28,000 (106%) Continuous RPM 27,709 (104.9%)

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Engine Limits (cont'd)

Turbine In	nterstage Tem	perature Limits
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Ground starting	815 °C
Air starting	864 °C
Maximum take-off (5 min)	877 °C
Maximum take-off (2 min)	890 °C
Maximum continuous	861 °C
Airstart transient (10 sec)	890 °C
Airstart transient (2 sec)	1000 °C

Oil Temperature

Maximum continuous	138 °C
Minimum continuous	30 °C
Maximum transient (3 min)	155 °C

Fuel Pump Inlet Pressure

Minimum 5 psi above true vapor pressure

Maximum 50 psig

Oil Pressure

Idle 30-85 psig Normal operating range 60-85 psig

Maximum transient (3 min) 100 psig (may be exceeded for

2.5 min. in case of a cold start

(temp < 0 C)

Thrust Reversers

Thrust reverser use is not approved, unless Dassault Aviation change M3B has been incorporated.

<u>APU</u>

Allied Signal Model GTCP36-150 (F2M)

Limitation

Maximum operating starting altitude	35,000 ft
Maximum N1 (%)	110
Exhaust gas temperature, Steady	746 °C
Exhaust gas temperature, Starting	974 °C
Maximum oil temperature	163 °C
Minimum oil pressure	35 psi

Operation of the APU with passengers in the cabin and without crew member monitoring is not authorized.

Airspeed Limits

Unless otherwise stated, speeds are indicated airspeeds

VMO (Maximum Operating)

350 kt at sea level, 370 kt at 10,000 ft with straight line variation between those points.

370 kt from 10,000 to 25,000 ft

MMO (Maximum Operating)

M = 0.862 from 25,000 to 38,000 ft

0.862 at 38,000 ft, 0.85 at 42,000 ft with straight line variation between those points

0.85 above 42,000 ft

Airspeed Limits (cont'o

VA (Maneuvering)	198 kt
VFE (Slat and Flap Speeds) Slats + Flaps 10° Slats + Flaps 20° Slats + Flaps 40°	200 kt 160 kt 160 kt
VLO (Landing Gear Operation)	190 kt
MLO	0.70
VLE (Landing Gear Extended)	245 kt
MLE	0.75
VMC (Minimum Control Speed) Flight	90 kt
Windshield Wiper Operation	215 kt

CG Range

(Gear Extended)

a. Without Option M57

Direct Vision Window

Weight (lb)	Forward Limit (% MAC)	Rearward Limit (% MAC)
36,000	16.7	26.2
33,000	14	-
28,660 or les	s 14	32.5

215 kt

b. With Option M57

Weight (lb)	Forward Limit (% MAC)	Rearward Limit (% MAC)
36,500	17.2	25.8
33,000	14	-
28,660 or les	s 14	32.5

Straight line variation between points.

Gear retraction has negligible effect on CG range.

Datum

Datum is 25% of mean aerodynamic chord (MAC) which coincides with fuselage station FS + 400.43 in (Fuselage station reference +0 is the foward end of the airplane nose cone).

Mean Aerodynamic chord (MAC) Length

113.69 in

Zero percent MAC is at FS +372.01 in

Leveling Means

Standard bubble type level to be installed on the passenger seat tracks

Minimum Crew

Maximum Baggage

Fuel Capacity

<u>Fuels</u>

Pressure Fueling

Maximum Operating Altitude

Control Surface Movements

Elevator

Rudder

Oil Capacity (each engine)

<u>Oils</u>

Maximum Passenger Seats

Weight Limitations With Ontion M57		Withou	t Option M57
With Option M57	36,000 lb		26 500 lb
Maximum ramp Maximum take-off	35,800 lb		36,500 lb 36,500 lb
Maximum landing	33,000 lb		33,000 lb
Maximum zero fuel	28,660 lb		28,660 lb
Minimum flight	20,000 10	,	28,000 10
at 14% CG	23,075 lb		23,075 lb
at 32.5% CG	20,100 lb		20,100 lb
	20,100 10	,	20,100 10
2 - Pilot and copilot			
19 - limited by emerge 25.807(c)	ncy exit requirements	of Federal A	viation Regulations §
0 - Without passenger pro M0054.	ovision but incorporating	Dassault Ferr	y flight configuration :
Baggage compartment		1,60	00 lb
(not to exceed 61.4	lb per sq ft)		
Naminal Dafanta	: alat and lactor	C 1 :	1 for t
Nominal - Refer to we Refer to NOTE 1(b) for			
Refer to NOTE 1(0) 10	r data on unusable sys	tem ruer and	OH
Usable Fuel	US Gallons	Pounds	Arm (in)
LH outboard wing	348.4	2,334	22.64
LH inboard wing	213.7	1,432	-27.68
LH center wing box	216.9	1,453	-37.76
LH Feeder tank	127	851	-16.34
RH outboard	349.2	2,340	22.64
RH inboard wing	214.1	1,435	-27.68
RH center wing box	217.4	1,457	-37.76
RH feeder tank	127.3	853	-57.87
Total Usable	1,814.0	12,155	-37.67
Total Fuel	1830.3	12,133	
Total Fuel	1030.3	12,237	
Fuels conforming to G	eneral Electric specific	cation No. D	50TF2, current
revision			,
See NOTE 4 for fuel ac	dditives		
The above mentioned f		also suitable	for the APU
Maximum		50 p	osi
D. C NOTE 1/L) C.	. 1.4	4 C 1 1	- *1
Refer to NOTE 1(b) fo	r data on unusable sys		
Usable			US gallon
Total		1.25	5 US gallon
Oil conforming to Gen oil Specification EMS			TR1, or Allied Signa
See NOTE 5	53110, current revision	••	
*	53110, current revisio	•	

Up 20° Left 29°

Down 16°

Right 29°

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> Aileron Up 25°20′ Down 24°50′

Flaps Down 40°

Control Surface Movements (cont'd)

Airbrakes Inboard up 68°

> Center up 50° Outboards up 37°

Wing slats Down 30°

Stabilizer Electrical stops AND 2° ANU 10°

> AND Max 2°30′ ANU Max 10°30′ Mechanical stops Structural stops AND Min 2°40′ ANU Min 11°

Rigging tolerances are included in Maintenance Manual

II. Model FALCON 2000EX (Transport Category Airplane) approved March 21, 2003

(a) Basic Model Definition

The Falcon 2000EX is defined by Dassault modification M1802 and differs from the Falcon 2000 in the following major respects: (i) Pratt & Whitney Canada Engines PW308C replace CFE 738-1-1B engines; (ii) New forward and aft fuel tanks are added, (iii) New main and nose landing gear, (iv) New tires and brakes

Engines 2 engines. (PRATT & WHITNEY Canada) Model PW308C Turbofan

(see NOTE 3b)

Engine Limits Static, Standard, Sea Level

> Take-off (5 min) 6,998 lb (3,114 daN)

> Maximum Continuous 6,998 lb (3,114 daN)

Maximum Steady State Rotor Speeds

Low pressure rotor (N1) RPM 10,660 (102.5%) High pressure rotor (N2) RPM 27,316 (102%)

Turbine Interstage Temperature Limits

Ground start 950 °C Air start 950 °C Normal Takeoff (5 min.) 860 °C Maximum take-off (5 min) 875 °C Maximum continuous 860°C

Restarting Max. (air start/ground start) 500 °C/ 340 °C

Transient (20 sec) 885 °C

Oil Temperature

135 °C Maximum 27 °C/ 16 °C Minimum takeoff/ in-flight Maximum transient (90 sec.) 143 °C Starting (minimum) -40 °C

Fuel Pump Inlet Pressure

Minimum (SEE ENGINE INSTALLATON

MANUAL)

(SEE ENGINE INSTALLATION Maximum

MANUAL)

Engine Limits (cont'd)

Oi1	Pressure
OH	Pressure

Operating Range 36 to 100 psi Minimum at Idle 20 psi Transient (20 sec.) 0 to 220 psi Transient (90 sec.) 10 to 220 psi Cold start: during starting 240 psi

Thrust Reversers

Thrust reverser use is approved only on the ground.

<u>APU</u>

Allied Signal Model GTCP36-150 (F2M)

Limitation

Maximum operating/starting altitude	35,000 ft
Maximum N1 (%)	110
Exhaust gas temperature, Steady	746 °C
Exhaust gas temperature, Starting	974 °C
Maximum oil temperature	163 °C
Minimum oil pressure	35 psi

Operation of the APU with passengers in the cabin and without crew member monitoring is not authorized.

Airspeed Limits

Unless otherwise stated, speeds are indicated airspeeds

VMO (Maximum Operating):

350 kt at sea level, 370 kt at 10,000 ft with straight line variation between those points.

370 kt from 10,000 to 25,000 ft

MMO (Maximum Operating):

0.862 from 25,000 to 38,000 ft

0.862 at 38,000 ft, 0.85 at 42,000 ft with straight line variation between

those points

0.85 above 42,000 ft

VA (Maneuvering)	198 kt
VFE (Slat and Flap Speeds)	
Slats + Flaps 10°	200 kt
Slats + Flaps 20°	190 kt
Slats + Flaps 40°	180 kt

190 kt VLO (Landing Gear Operation)

MLO 0.70

VLE (Landing Gear Extended) 245 kt

MLE 0.75 A50NM Page 7 of 16 Rev 4

Airspeed	Limits ((cont'd)

VMC (Minimum Control Speed)

Flight 90 kt

Windshield Wiper Operation 215 kt

Direct Vision Window Opening 215 kt

CG Range

 (Gear Extended)
 Weight (lb)
 Forward Limit (% MAC)
 Rearward Limit (% MAC)

 40,900
 15.7
 23.4

 38,300
 14
 26.0

 28,660 or less
 14
 32.5

Straight line variation between points.

Gear retraction has negligible effect on CG range.

Datum b Datum is 25% of mean aerodynamic chord (MAC) which coincides with

fuselage station FS + 400.43 in (Fuselage station reference +0 is the forward

end of the airplane nose cone).

Mean Aerodynamic chord (MAC) Length 113.69 in

Zero percent MAC is at FS +372.01 in

<u>Leveling Means</u> Standard bubble type level to be installed on the passenger seat tracks

(serial no.1 only)	With M1826	and with M1842
0,900 lb	41,500 lb	42,400 lb
0,700 lb	41,300 lb	42,400 lb
8,300 lb	39,300 lb	39,300 lb
9,700 lb	29,700 lb	29,700 lb
23,444 lb		
21,149 lb		
2	0,900 lb 0,700 lb 3,300 lb 0,700 lb 23,444 lb	0,900 lb 41,500 lb 41,300 lb 3,300 lb 39,300 lb 29,700 lb 23,444 lb

<u>Minimum Crew</u> 2 - Pilot and copilot

<u>Maximum Passenger Seats</u> 19 - limited by emergency exit requirements of Federal Aviation Regulations §

25.807(c)

Maximum Baggage Baggage compartment 1,600 lb

(not to exceed 61.4 lb per sq ft)

Fuel Capacity Nominal - Refer to weight and balance report of each airplane for exact capacity

Refer to NOTE 1(b) for data on unusable system fuel and oil

Without M1826 applied (serial no. 1 only)

Usable Fuel	US Gallons	Pounds
LH wing+1/2 center wing box	911	6,105
RH wing+1/2 center wing box	911	6,105
Rear Tank	244	1,630
Front Tank	329	2,205
Total Usable	2,395	16,045

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Fuel Consoity (cont'd)	Total Fuel		2,407	16,127
Fuel Capacity (cont'd)	With M1826 applied (serial no. 2 and on)			
<u>Fuels</u>	Usable Fuel LH wing+1/2 cer RH wing+1/2 cer Rear Tank Front Tank Total Usable Total Fuel Fuels and additiv	nter wing box	US Gallons 909 912 293 383 2,497 2,509 the specification	Pounds 6,092 6,112 1,962 2,564 16,730 16,812 as listed in the applicable
	P&WC Maintenance Manual are approved. See NOTE 4 for fuel additives. The above mentioned fuels and additives are also suitable for the APU Fuel anti-icing must be used for fuel temperature below –50 °C			
Pressure Fueling	Maximum			50 psi
Oil Capacity (each engine)	Refer to NOTE 1 Usable Total	(b) for data on unusa	•	and oil 0.49 US gallon 2.4 US gallon
Oils	Oils conforming to the Specifications listed in the applicable P&WC Maintenance Manual (P/N 30C3882) are approved			
Maximum Operating Altitude	47,000 ft			
Control Surface Movements	Elevator Rudder Aileron Flaps Airbrakes	Down 16° Right 29° Up 25°20′ Down 40° Inboard up 60° Center up 50° Outboards up	0	
	Wing slats Stabilizer Rigging tolerance	Down 30° Electrical stops Mechanical stops Structural stops es are included in Ma	AND Min 2°4	ANU 10° 30′ ANU Max 10°30′ 40′ ANU Min 11° ual

(b) Falcon 2000EX EASy Definition

EASy designation for Falcon 2000EX does not correspond to a model designation. This is only a commercial designation for airplanes on which Major modification numbers M1691, M1745, and M1504 have been embodied.

Major Change Modification number M1691 to the Falcon 2000EX consists of the installation of an Enhanced Avionics System (EASy) based on the Honeywell "Primus EPIC" product line. This system architecture is mainly built around 2 cabinets called Modular Avionics Units (MAU), 2 Modular Radio Cabinets (MRC), 2 Audio panels, 2 reversionary panels and 4 14.1 inch Liquid Crystal Displays. The pilots have access to the system using the 2 CCDs with multipurpose knob, menu pushbutton, display switch, action pushbuttons and trackball, 2 alphanumeric keyboards and the hard controls.

M1745 installs an "Oxygen system electro-pneumatic altimetric controller"

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M1504 installs an "All falcon Common pressurization system"

M1691, M1745, and M1504 are basic on all Falcon 2000EX aircraft serial numbers 6, 28 and subsequent.

All parameters listed in the preceding sub-section (a) for the basic Falcon 2000EX remain valid for airplanes which incorporate M1691, M1745 and M1504.

Data Pertinent to all Models

Manufacturer Serial Number Eligible

A French "Certificat de Navigabilité pour Exportation" endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for US certification is made.

Serial Numbers:

For FALCON 2000: Aircraft serial number 1 and up

For FALCON 2000EX: Aircraft serial number 1 through 5 and 7 through 27. Serial numbers 6, 28 and subsequent include M1691, M1745, and M1504 as standard (F2000EX EASy definition).

Import Requirements

The FAA can issue a U.S. airworthiness certificate based on an NAA Export Certificate of Airworthiness (Export C of A) signed by a representative of the Direction Generale de l'Aviation Civile (D.G.A.C.) of France on behalf of the European Community. The Export C of A should contain the following statement: 'The aircraft covered by this certificate has been examined, tested, and found to conform with Type Design approved under U.S. Type Certificate No. A50EU and to be in a condition for safe operation.'

Certification Basis

(a) For FALCON 2000 (basic model):

- 1. FAR, Part 25 as amended by Amendment 25-1 through 25-69. In addition, Dassault Aviation has elected to comply with amendments 25-71 for § 25.365(e), 25-72 for § 25.783(g) and 25.177; 25-75 for § 25.729(e); 25-79 for § 25.811(e)(2) and 25-80 for § 25.1316
- 2. FAR Part 34, original issue (Fuel Venting and Exhaust Emissions)
- 3. FAA, Part 36 as amended by amendment 36-1 through 36-20
- 4. FAA, Special Conditions:

25-ANM-90 - High Altitude Operation

25-ANM-91 - High -Intensity Radiated Fields

25-ANM-94 - Automatic Takeoff Thrust Control System

5. FAA Exemption No. 5991 (for side facing sofa)

For precision approach and landings, the applicable technical requirements are complemented by FAA Advisory Circulars (AC) 120-29 and AC 120-28(c)

For the automatic flight control system, the applicable technical requirements are complemented by AC 25.1329-1A for cruise.

Equivalent safety findings exist with respect to the following requirements:

- Design gust criteria, (refer to Issue Paper (IP) A-5)
- Use of the 1-g stall speeds instead of minimum speed in the stall as a basis for determining compliance (refer to IP F-1)
- Rejected take-off and landing performance (refer to IP F-3)
- N2 Digital Indication (refer to IP P-10)
- Flight Critical Thrust Reverser Certification (refer to IP P-7)

Compliance has been shown to the following optional requirement:

- Ditching, FAR § 25.801
- Ice Protection FAR § 25.1419

Type Certificate A50NM issued February 2, 1995 Reference date for type certification: November 30, 1989

(b) For Falcon 2000EX

(1) For parts of the airplane not changed or not affected by the modifications:

Unchanged from basic Falcon 2000

(2) For those parts of the airplane that are changed or are affected by the modifications M1802, M1803, M1804, M1805:

The following sections of 14 CFR 25 as amended by amendments 25-1 through 25-98 apply per the FAA derivative aircraft process FAA Order 8110.4B to the changes and areas affected by the changes for the Falcon 2000EX:

Subpart B - Flight:

All the paragraphs are applicable at amendment 25-98 <u>except</u> the following which are applicable as modified in Equivalent Level of Safety Finding Issue Paper F-4 titled "Use of 1-g Stall Speeds Instead of Minimum Speed in the Stall as a Basis for Determining Compliance"

25.103, 25.107, 25.111, 25.119, 25.121, 25.125, 25.143, 25.145, 25.147, 25.149, 25.161, 25.175, 25.177, 25.181, 25.201, 25.207, 25.231, 25.233, 25.237

Subpart C – Structure:

All the paragraphs are applicable at amendment 25-98

Subpart D – Design and Construction:

The following paragraphs are applicable at amendment 25-98:

25.601 to 25.703, 25.721, 25.723, 25.729, 25.801, 25.863 to 25.869

The following paragraphs are applicable as modified by Equivalent Level of Safety Issue Paper F-4 titled "Use of 1-g Stall Speeds Instead of Minimum Speed in the Stall as a Basis for Determining Compliance":

25.735, 25.773

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Subpart E – Powerplant:

All the paragraphs are applicable at amendment 25-98 except the following which is applicable as modified in Equivalent Level of Safety Finding Issue Paper F-4 titled "Use of 1-g Stall Speeds Instead of Minimum Speed in the Stall as a Basis for Determining Compliance"

25.1001

Subpart F – Equipment:

The following paragraphs are applicable at amendment 25-98:

25.1301, 25.1305 to 25.1322, 25.1337, 25.1431

The following paragraphs are applicable as modified by Equivalent Level of Safety Issue Paper F-4 titled "Use of 1-g Stall Speeds Instead of Minimum Speed in the Stall as a Basis for Determining Compliance":

25.1323, 25.1325, 25.1587

Subpart G – Operating Limitations and Information:

All the paragraphs are applicable at amendment 25-98 except the following:

25.1515, 25.1522, 25.1523, 25.1525, 25.1529, 25.1531, 25.1547, 25.1561

- (3) FAR Part 34, original issue (Fuel Venting and Exhaust Emissions)
- (4) FAA, Part 36 as amended by amendment 36-1 through 36-24
- (5) FAA, Special Conditions:

25-ANM-90 - High Altitude Operation

25-ANM-91 - High -Intensity Radiated Fields

25-ANM-94 - Automatic Takeoff Thrust Control System

- (6) FAA Exemption No. 5991 (for side facing sofa)
- (7) Equivalent safety findings exist with respect to the following requirements:
- Use of the 1-g stall speeds instead of minimum speed in the stall as a basis for determining compliance (refer to IP F-4)
- Flight Critical Thrust Reverser Certification (refer to IP P-12) Turbine Engine Tailpipe Fire Detection (refer to IP P-15)
- (8) Miscellaneous:

For precision approach and landings, the applicable technical requirements are complemented by FAA Advisory Circulars (AC) 120-29 and AC 120-28(c)

For the automatic flight control system, the applicable technical requirements are complemented by AC 25.1329-1A for cruise.

Reference date of application for amendment to type certificate is January 7, 2000.

(c) For FALCON 2000EX airplanes incorporating Dassault modifications M1691, M1745, and M1504 (Falcon 2000EX EASy definition):

- (1) For parts of the airplane not changed or not affected by the modifications: Unchanged from basic Falcon 2000EX
- (2) For those parts of the airplane that are changed or are affected by the modifications M1691, M1745, and M1504:

The following sections of 14 CFR 25 as amended by amendments 25-1 through 25-98 apply per the FAA derivative aircraft process FAA Order 8110.4B to the changes and areas affected by the changes for the Falcon 2000EX EASy definition:

Subpart B - Flight:

25.207: « Stall warning »

Subpart C – Structure:

25.581 : « Lightning protection»

Subpart D – Design and Construction:

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25.601: « General »
25.611: « Accessibility provisions »
25.631: « Bird strike damage »
25.671(b)(c): « Control systems: general »
25.672: « Stability augmentation and automatic and power-operated systems »
25.677(b): « Trim systems »
25.699: « Lift and drag device indicator »
25.703: « Take-Off warning systems »
25.729(e): « Retracting mechanism »
25.771 (a) (c) (e) : « Pilot compartment »
25.773(a)(d): « Pilot compartment view »
25.777 (a)(b)(c)(d)(e)(f): « Cockpit controls »
25.783(e): « Doors »
25.789(a): "Retention of items of mass in passenger and crew compartments
and galleys"
25.791(a)(b): "Passenger information signs and placards"
25.812(f): "Emergency lighting"
25.841(b)(5)(b)(6): « Pressurised cabins »
25.863(c): « Flammable fluid fire protection »
25.869(a): « Fire protection: systems »
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Subpart E – Powerplant:

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25.901 (c): « Installation »
25.903 (b) and (d)(2): « Engines »
25.1141(a) and (f): « Powerplant controls- General»
25.1143(a), (b) and (c): « Engine controls»
25.1145(a)(b): « Ignition switches »
25.1155: « Reverse thrust and propeller pitch settings below the flight regime»
25.1189(f): « Shutoff means»
25.1203 (b)(2)(b)(3)(d): « Fire-detector system »
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Subpart F – Equipment:

25.1301 : « Function and Installations » 25.1303: « Flight and Navigation Instruments » 25.1305: « Powerplant Instruments » 25.1307(c)(d)(e): « Miscellaneous equipments » 25.1309: « Equipment, systems and installations » 25.1316: « System lightning protection » 25.1321: « Arrangement and visibility » 25.1322 : « Warning, Caution and advisory lights » 25.1323 : « Airspeed indicating system » 25.1325(a)(c)(d)(e)(f)(g) : « Static pressure systems » 25.1326: « Pitot heat indication systems » 25.1327: « Magnetic direction indicator » 25.1329: « Automatic pilot system » 25.1331 : « Instruments using a power supply » 25.1333 : « Instrument systems » 25.1335 : « Flight director systems » 25.1337(b)(d): « Powerplant instruments » 25.1351 : « Electrical Systems and Equipment - General » 25.1353: « Electrical equipment and installations » 25.1355: « Distribution system » 25.1357: « Circuit protective devices » 25.1381: « Instrument lights » 25.1419(c): « Ice protection » 25.1431 : « Electronic equipment » 25.1435 (a)(2): « Hydraulic systems » 25.1457: « Cockpit voice recorders » 25.1459: « Flight recorders »

Subpart G – Operating Limitations and Information:

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25.1501(b)(c): « General »
25.1523: « Minimum flight crew »
25.1529: « Instructions for continued airworthiness »
25.1541: « Markings and placards - General »
25.1543(b): « Instrument markings: General »
25.1545: « Airspeed limitation information »
25.1547: "Magnetic direction indicator"
25.1549: « Powerplant instruments »
25.1551: « Oil quantity indicator »
25.1553: « Fuel quantity indicator »
25.1563: « Control markings»
25.1563: « Airspeed placard »
25.1581: « Airplane flight manual – General »
25.1585(a)(b)(d)(e): « Operating procedures »
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The Direction Generale de l'Aviation Civile (D.G.A.C.) of France originally type certificated this aircraft under its type certificate Number 185. The FAA validated this product under U.S. Type Certificate Number A50NM. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of the D.G.A.C..

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Type Definition

For the Falcon 2000, the type definition is DASSAULT AVIATION Drawing List 01-130 Ref. DGT 21172 Issue A

For the Falcon 2000EX, the type definition is DASSAULT AVIATION document M1802-01-130 (DGT-F/NAV89793) – Master Drawing Lists

Definition of Falcon 2000EX results of the addition of Falcon 2000 definition plus application of M1802, M1803, M1804, M1805, M1820, M1838 and M2233.

From aircraft s/n 2 and on, modification M1826 is applied resulting in an increase in fuel capacity and maximum weights.

Definition of the Falcon 2000EX EASy is the result of the basic Falcon 2000EX definition plus application of M1691, M1745, and M1504.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed on the aircraft for certification. The lists of all equipment as well as optional equipment approved by Direction Générale de l'Aviation Civile (DGAC) of France are contained in the documents:

For the FALCON 2000, in memos Nos.:

- DTM 38-2000/90 (01-940) Equipment list of the basic airplane
- DTM 38-0735/91 (01-941) Equipment list of the standard option and other options

In addition, the aircraft must be operated in accordance with the DGAC approved FALCON 2000 Airplane Flight Manual, document DTM 537 approved February 2, 1995

For the FALCON 2000EX:

M1802-01-940 (DGT-DTF/NAV81711) – Equipment List – Basis Aircraft

In addition, the aircraft must be operated in accordance with the DGAC approved FALCON 2000EX Airplane Flight Manual, Document No. DGT84278

For the Falcon 2000EX EASy:

M1691-01-101 (DGT-DTF/NAV 96502) - Equipment list for F2000EX EASy

In addition, the aircraft must be operated in accordance with the Falcon 2000EX EASy Airplane Flight Manual, document DGT88898.

Service Information

Each of the documents listed below that contain a statement that it is approved by the European Aviation Safety Agency (EASA) - or for approvals made before September 28, 2003 - by the the Direction Generale de l'Aviation Civile (D.G.A.C.) of France, are accepted by the FAA and are considered FAA approved. Additionally, approvals issued by Dassault Aviation under the authority of EASA approved Design Organization EASA.21J.051 - or for approvals made before September 28, 2003 - under the authority of DGAC

<u>Design Organization Approval No. No. F.JA.03</u> are considered FAA approved. These approvals pertain to the type design only.

Service Information (con't)

- Dassault Aviation Service Bulletins, except as noted below,
 - Structural repair manuals,
 - Vendor manuals referenced in Dassault Aviation service bulletins
 - · Aircraft flight manuals,
 - Repair Instructions.

Note: Design changes that are contained in Dassault Aviation Service Bulletins and that are classified as Level 1 Major in accordance with either the US/Direction Generale de l'Aviation Civile (D.G.A.C.) of France or US/EASA Bilateral Aviation Safety Agreement Implementation Procedures for Airworthiness must be approved by the FAA.

NOTES

NOTE 1 - Weight and Balance

- (a) Current weight and balance report including a list of equipment included in certificated empty weight, and loading instructions when necessary must be provided for each aircraft at its delivery.
- (b) The following must be included in the airplane empty weight:
 - The total unusable fuel, 82 lb, plus
 - The unusable engine oil, 4.1 US gallons, 34 lb, (drainable and trapped oil) at arm + 150 in, and
 - The hydraulic fluid 83 lb at are + 127 in
- (c) The airplane must be loaded in accordance with the FALCON 2000 Loading Manual (DTM 541) or the FALCON 2000EX Loading Manual (DGT 65), as applicable and the CG must be within the specified limits at all times.

NOTE 2 - Reserved

NOTE 3 - Service Life Limits and required Maintenance/Inspections

- (a) Airframe components which are life limited, and associated retirement times, are presented in DGAC approved chapter 5.40.00 of the FALCON 2000 and Falcon 2000EX Maintenance Manual, and must be replaced as indicated therein.
- (b) For the Falcon 2000: CFE 738-1-1B engine life limits, established for critical rotating components, are published in the approved Engine Light Maintenance Manual, Report Number 72.08.03, Airworthiness Limitation Section.
 - For the Falcon 2000EX: PW308C engine life limits are listed in the Airworthiness Limitation Section of P&WC Maintenance Manual P/N 30C3882.
- (c) Required maintenance and inspections to maintain airworthiness based on involving reliability are presented in DGAC approved chapter 5.40.00 of the FALCON 2000 and Falcon 2000EX Maintenance Manuals.

NOTE 4 - Fuel Specifications and Additives

- (a) For information concerning equivalent fuel specifications, see Airplane Flight Manual
- (b) Additives

For the CFE 738 engines; PW308C engines; and GTCP 36-150 auxiliary power unit, the following additive limitations are approved.

- Anti-icing additives, conforming to AIR 3652 of MIL-I 27686 D or E (JP-4/JP-8) or to MIL-I 85470 (JP-5) or equivalent are approved for use in the fuel in amounts up to 0.15 per cent by volume.
- SOHIO BIOBOR JF biocide additive, or equivalent, is approved for use in fuel at a concentration not exceeding 270 PPM
- Anti-static additive is approved for use in fuel at a concentration not exceeding 1 PPM for SHELL ASA 3; and 3 PPM for STADIS 450

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NOTE 5 - Qualified Oils

- (a) Engine: See CFE 738 Engine Installation Manual IM 75 550 for specific oils approved per the subject specification.
- (b) APU: Brand names of oils approved for use in the APU are listed in the GTCP36-150 Maintenance Manual

NOTE 6 - The Model Falcon 2000 (incorporating M1251), Falcon 2000EX, and Falcon 2000EX EASy have been approved to operate in "Reduced Vertical Separation Minimum" (RVSM) airspace when the airplanes are operated in accordance with Airplane Flight Manual page 1-160-1. Continued airworthiness and operational approval aspects of RVSM must be constructed according to Advisory Circular (AC) 91-RVSM, titled "Approval of Aircraft and Operators for Flight in Airspace Above Flight Level (FL) 290 Where a 1,000 Foot Vertical Separation Minimum is Applied."

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